

THE CATALOGSM

The "Cyber" Line Goes Pro...



...with Cyber Paint Computer Animation!



Introducing...

Our Cover: At One-Pass Video, in San Francisco, the Cyber Desktop Video software rubs elbows with the likes of Ampex, Dubner and Wavefront. One-Pass Video is the largest video post-production and computer graphics facility in northern California. Their credits include TV commercials for Apple, Chevron, Purina, and Frito-Lay, plus MTV music videos, TV specials, and award-winning footage for the CBS Evening News.



Although the end resolution and limited colors of the Atari ST can't possibly compete with the Dubner or

the Wavefront, Cyber products offer a viable alternative to traditional storyboard techniques. Customers can quickly (and inexpensively) demonstrate graphics and animation concepts using CYBER STUDIO, CYBER PAINT, and SPECTRUM 512. These concepts are later converted to the larger machines. Plus, CYBER SCULPT is used to create the actual 3D models which are ported (via FLASH) to the One Pass Video supercomputer and rendered in 16 million colors.

The low-cost alternative of Cyber conceptualization is being discovered by other graphic-intensive businesses, such as Lucasfilm, Paramount Pictures, General Dynamics, Rockwell, Polaroid, and many university computer and film departments throughout the country.

Our Customer Service department fields hundreds of questions daily — many about our Cyber family of products. Those of you new to our product line (or those silently wondering) may find the following helpful:

WHAT DOES 'CYBER' MEAN?

When you see the word *Cyber* in front of any of our products, you know that product is somehow related to computer *animation*. (That's why SPECTRUM 512 doesn't include the word *Cyber*.) The root of the word *cyber* is to *pilot*. Cyber software is your pilot through a new universe: Cyberspace.

WHAT IS 'DESKTOP VIDEO'?

Well, desktop *publishing* is the application of low-cost micros in the professional publishing business. Desktop video is the next logical step: using the microcomputer to create professional, and economical, video displays.

MY GRAPHICS LOOK GREAT ON MY ST, WHY PUT THEM ON VIDEOTAPE?

For one thing, animations take memory. Record your animations onto videotape (using your VCR alone or with CYBER VCR), and you can get hours of graphics rather than minutes. Also, more people own VCR's than own ST's (over 40,000,000 versus under 200,000). Your completed videotape can be mailed to practically anyone; only an Atari owner can look at your disk.

WHAT DO I NEED TO PUT MY ATARI GRAPHICS ON VIDEOTAPE?

Video graphics are simply a recording of what is displayed on your monitor. However, the RGB output of your computer must be converted to an acceptable signal for your VCR. Many 520ST's have built-in RF modulators — plug a special monitor cable or Monitor Master into those 520's and you've got the composite

signal you'll need. But since most Atari's don't have composite output, an RGB-to-composite converter is required. Call Practical Solutions (602-884-9612) for all of the above. Or, you can use the JRI Genlock (415-458-9577) which lets you blend video images with computer images and produces a true RS-170 NTSC signal.

I WANT TO GET INTO DESKTOP VIDEO, BUT, RIGHT NOW, I CAN ONLY AFFORD ONE PROGRAM. WHICH PROGRAM SHOULD I GET FIRST? Depends on your interest. If you like 3D graphics, begin with CYBER STUDIO and CYBER CONTROL. Anyone with a craving for animation should start with CYBER PAINT. And those who want the best art tools available will find them in SPECTRUM 512. The following chart will help:

Goal	Product
2D static or true color graphics	SPECTRUM 512
3D static graphics	CYBER STUDIO
3D animated graphics	CYBER STUDIO & CYBER CONTROL
2D & 3D, animated or static graphics	CYBER PAINT

DO YOU PUBLISH ANYTHING BESIDES GRAPHICS PRODUCTS?

Absolutely! Take a look at our products from page 12 on. We publish FLASH, the most popular terminal program on the ST, as well as several related telecommunications programs. (Be sure and check out SHADOW, our new multitasking file-transfer program.) Our educational software — such as GENESIS, the 3D Molecular Modeler, or MAPS AND LEGENDS — are sophisticated for a broad age range, yet extremely easy to use. According to our customers, PHASAR is the best home financial package for your ST, and be sure and read about our new MACRO MOUSE utility. We even offer the only collection of stereoscopic computer games.

CYBER SCULPT™ The 3D Modeling Tool™

by Tom Hudson

When Tom Hudson wrote CAD-3D 2.0 for the CYBER STUDIO (ST0236), memory limitations confined him to two basic object-modeling tools: Spin and Extrude. And, when combined with the ability to join objects, these tools offered (and still offer) variety and flexibility.

But Tom knew of more sophisticated object-modeling tools on high-end workstations — such as the Iris or Sun. He figured the best way to fit all those bells and whistles in one meg of ST RAM was to design a program that does just one thing — builds three-dimensional objects. And not just spun or extruded, but twisted, pushed, pulled, tweaked, and pummeled. The most fantastic shapes imaginable.

Skew, Twist, and Bend
Tom's new program is called CYBER SCULPT. It's mouse-controlled,

stand-alone, and a lot of fun to use. If CAD-3D object creation is like working with wood, CYBER SCULPT object creation is like working with clay. Don't like the shape of that object? Grab some vertices, and drag them into a better position. Or move a magnet over your object and watch the vertices stretch toward it. Skew, twist or bend objects into incredible shapes.

CYBER SCULPT includes cross-sectional modeling for shapes like boat hulls, or dimensional topography. And, for you engineers, we include optional manual data entry, and support for the more popular digitizing tablets.

Take a look at these features:

- Object Distortion — Skew (diagonal shear), bend (to any angle), and twist (along user-defined axis).
- Vertex Pulling — Distort by direct vertex manipulation.
- "Magnet" — Stretch selected vertices based on distance from magnet.

- Cross-sectional Model Creation — Connect multiple templates using spline-based paths; rotate templates along the path of creation.
- Spin — Like CAD-3D, but includes "cork-screw" option.

- Complex Extrude — Single-template extrusion with optional end-capping, spline-controlled twist, and spline-controlled extrusion path.

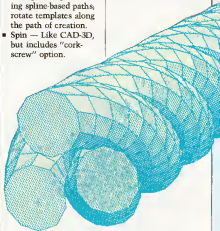
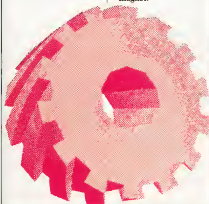
- Variable-magnification work window — see and manipulate entire model or just a small part.

- Face Beveling
- Manual Face Coloring — "Paint" object's faces with specific colors.
- 3D Mirroring — Create half the model, then mirror it to make the other half.
- 2D Template Toolkit:
 - Spline interpolation of points with user-defined smoothness.
 - Point mirroring, scaling, dragging, cloning
 - n-face automatic polygon creation.
 - Arc generation.
- 3D primitives: Cubes, Prisms, Spheres, Hemispheres, Cones, Cylinders, Tubes, Discs.
- 2D/3D coordinate display.
- Raster tracing — convert 2D pictures into 3D objects.
- Isometric projection view window.

**CYBER SCULPT
ST0255** Available in July
REQUIRES One megabyte
RAM



All 50 states 6AM-4PM PACIFIC TIME
Monday-Friday MasterCard, VISA Only



ST Cyber Family

"Atari's CAD-3D is one of the best programs I've seen for the Atari or anything else."

— Jerry Pournelle, Byte Magazine

THE CYBER STUDIO™ Featuring CAD-3D 2.0

STEREOTEK
3D
GLASSES



Works with all ST paint programs, and the CYBER family.

Tom Hudson's STEREO CAD-3D 2.0 Hidden within your Atari ST is a professional 3D workstation. A 3D solid-modeling design system that is intuitive — yet powerful enough for professional artists, advertising agencies, or design firms.

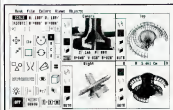
Design and walk through your dream house with CAD-3D 2.0. Programmers use our system for dimensional tasks like flight-simulator scenic design; artists create accurate perspective foundations for their DEGAS or Neo-Chrome pictures; engineers find CAD-3D 2.0 the perfect sketchpad for conceptual design, and VCR owners use the CYBER STUDIO to create 3D titles and cartoons for home videos.

Plus, we made version 2.0 an open-architecture system, so that any programmer can easily write custom applications for CAD-3D 2.0 that run as desk accessories: motion control choreography (CYBER CONTROL), advanced rendering (ray tracing, texture mapping, finite element analysis, custom modeling tools... There's no limit. CAD-3D 2.0 will never become obsolete.

Let your creativity soar with all these new features:

- Icon control panel — fast, intuitive interface
- All new, DEGAS-style color design system permits custom-color lines, edges and backgrounds, plus multi-colored objects

- Real-time display mode for instant response (uses 3D math developed by Jez San for Starglider)
- Supports (optional) STEROTEK 3D glasses (TH9020) for true 3D viewing



- Dimensioning (feet/inches or meters/centimeters)
- Graphic lighting control — drag 3 lights anywhere
- GDOS output supports laser and dot matrix printers
- User-selectable pivot points for articulated rotations
- Enhanced Spin, Extrude, and Join tools
- Load DEGAS pics into CAD-3D background

Starglider™ Firebird Software
DEGAS™ Batteries Included
Generic CADD 2.0™ Generic Software

Mark Kimball's CYBERMATE™
The CAD-3D Animation/Editing language CYBERMATE is a "post-production" animation editing language that gives you control over:

- Sequence looping, cuts, fades & dissolves
- Color cycling animation
- Sound effects (created with the G.I.S.T. editor, on pg. 22)
- Title generation and text display

THE CYBER STUDIO
STEREO CAD-3D 2.0
plus CYBERMATE
(2-disk set)
ST0236 \$89.95
REQUIRES: one megabyte RAM
Upgrade from CAD-3D 1.0
for only \$60 (plus original disk and \$5 shipping)

The Original...

Tom Hudson's CAD-3D™ 1.0

520ST-compatible



If you have 512K of RAM and are interested in computer graphics, many of the features of CAD-3D 2.0 are included in this original version—even a basic animation system. CAD-3D 1.0
ST0214 ~~\$89.95~~
REQUIRES: 512K RAM
Now! \$29.95

"A remarkably powerful modeling system." — Computer Graphics World

CYBER CONTROL™ 1.1

The CAD-3D Motion Control Language

by Tom Hudson

CYBER CONTROL is the CAD-3D Motion Control Language — a desk accessory programming language, with built-in GEM text editor. When you want to simulate a real event with articulated life-like animation, plug in to CYBER CONTROL.

CYBER CONTROL is an animation scripting language that locks in to CAD-3D 2.0, controls all of its functions, and magnifies its already powerful capabilities. Whether you're a hobbyist or a scientist, you can create animated 3D models in a single afternoon. Simulate particle physics; 3D animation for entertainment or education; 3D financial analysis; animated, fully dimensional math models; event reconstruction of P.I. litigation, human factors engineering... you name it!

Now, you can write code to control any feature of CAD-3D 2.0—plus powerful features not in CAD-3D 2.0! But let's let Tom describe it:

As CAD-3D 2.0 grew into a powerful animation system, I realized that truly complex animations would require a scripting language for proper control. I purposely designed CYBER CONTROL as a BASIC-like language so anyone could pick it up quickly.



When activated in CAD-3D 2.0, CYBER CONTROL takes over full control of all functions, creating and manipulating objects, lights, and cameras (three different ones). Its primary use is as a cinematic motion-control script language, but its flexible nature makes it an ideal "front-end" for CAD-3D to let you write your own BASIC-like programs that use CAD-3D as a "graphic engine."

Features include:

- Two new cameras! Now, move your camera anywhere in the CAD-3D universe — fly through your scenes!
- Real-time animation preview mode!
- Hierarchical Connectivity. Attach objects to each other for fluid, connected movement — walking skeletons, or hinged mechanisms.
- Smooth, 3D spline generation:
 - Move cameras along realistic flight paths
 - Apply natural movements to articulated models
 - Build new types of models (coils, fractals, etc.)
- Layer foreground and background images for cel animation.

Plus advanced power:

- FOR/NEXT for full Loop control; Conditional IF/THEN; COSUB/RETURN.
- Labels instead of line numbers
- Numeric expression handling; floating point; logical AND and OR; parenthesized expressions; function library including sine, cosine, tangent, square root, and more!
- Up to 128 user-defined, alphanumeric variables, significant to 8 characters! Hardecopy Print statement for debugging.

I hope you enjoy CYBER CONTROL. Your ST can automatically create animations that would take you days to complete — in a matter of hours. Start the program and walk away, as your computer does all the work!

— Tom Hudson

CYBER CONTROL

ST0250 \$59.95

REQUIRES: CYBER STUDIO (ST0236)

3D PLOTTER & PRINTER DRIVERS™

Supports Hewlett-Packard pen plotters (and compatibles), plus screen-dump drivers for Gemini/Star, Epson, Okidata, IBM, Color, NEC, Panasonic, C-Itch dot-matrix printers.

PLOTTER DRIVERS

ST0225 \$24.95

REQUIRES: CAD-3D 1.0, or CYBER STUDIO

The programmer's interface to CAD-3D! 3D DEVELOPER'S DISK

For CYBER STUDIO

by Tom Hudson

Works with most popular ST C's plus assembly language

If you are a programmer with some experience in C, you can unlock the deepest secrets of Tom Hudson's code. He purposely left a special desk accessory "pipeline" to his program so CAD-3D would never become obsolete. Tom himself used this pipeline to create CYBER CONTROL, and now you can use it to create your own 3D programs.

In the 3D DEVELOPER'S DISK, Tom clearly explains to programmers and developers how to access the pipeline. Included on the disk are complete descriptions of the CAD-3D object-file formats, full-featured source and object code examples, as well as detailed instructions by Tom Hudson showing you how to hook into CAD-3D 2.0. Create your own 3D applications — with no knowledge of 3D math. (No licensing fee required.)

3D DEVELOPER'S DISK
ST0244 \$29.95
REQUIRES: CYBER STUDIO (ST0236)



AE 30 states 6AM-6PM PACIFIC TIME
Monday-Friday MasterCard, VISA Only

Produce Your Own Cyber Video!

CYBER VCR™

The Video Connection

by Tom Hudson



Now that you've created your library of Cyber animations, it's time to tie the whole thing together — on videotape! CYBER VCR is a video sequencer that automatically links your Cyber animations into a professionally edited videotape up to four hours long. And the whole thing is mouse controlled, so it's a cinch to use. In fact, we'll describe it right here.

Plug the special umbilical cable (included with CYBER VCR) between a compatible Sony VCR (listed below) and the printer port of your Atari ST. Run CYBER VCR and a chart of columns and rows will appear. Click on any row, select your Cyber animation from the file selector—it's now listed on the screen chart.

Drag your titles into any order with the mouse — or clone them if you wish your animation to appear more than once. With any animation listed, you may set its start frame, stop frame, number of cycles and cycle mode (forward or ping pong), and playback speed.

Animations may be spliced seamlessly on tape because of Sony's flying erase head. Or, you may fade in or out from black or white — at variable rates. Or you can use one of the many custom graphic wipes from the library on your CYBER VCR disk. And if you can't find the wipe you want, create your own wipes with CYBER PAINT!

Only one more thing to do: click the Record button on the CYBER VCR screen, then sit back and relax. CYBER VCR will take over, controlling every function of the Sony recorder. All the buttons on the deck are duplicated on the CYBER VCR screen; it can even eject the cassette! In no time at all, a professionally edited videotape of computer graphics is ready to show to clients, friends, or family — and they won't need an ST to view it!

CYBER VCR
ST0257 \$69.95
REQUIRES: One-megabyte RAM, animations created by CYBER STUDIO or CYBER PAINT; one of the following Sony VCR models: Beta HF750 or HF1000; 8mm

EVC8U; Camcorder CCD-V8, CCD-V8AFU, CCD-V9, CCD-V110. *Note: All future Sony models will include the necessary 5-pin remote jack required by CYBER VCR.*

ALSO REQUIRES: You must also have some way of sending a composite video signal into the "video in" port of the Sony VCR (either with a S20ST, Video Key, or Genlock).

JOIN THE CYBER FAMILY!

Don't forget to send in your warranty cards when you buy Cyber software. It's the only way to join our Cyber Family. Receive upgrade information, special offers, and our new Cyber Newsletter. It's all for you, but only if you become a registered owner of Cyber software.



All 50 states GAM-STM PACIFIC TIME
 Monday-Friday MasterCard, VISA Only

3D-FONTS II™

by Doug Thomas



Spectacular new fonts plus a potpourri of 3D clip art. Includes 45 computer-style all-cap, 45 gothic upper/lower-case, 2-color gothic all-cap, and 2-color serif all-cap. These fonts are beautiful! Imagine the CYBER animation titles you can create with these. Packed disk also includes 19 multicolor decorative objects including face masks, corner pieces, stars, etc. Dress up your 3D world with this fabulous clip art.

3D-FONTS II

ST0254 \$29.95

REQUIRES: CAD-3D 1.0, or CYBER STUDIO

3D-FONTS I™

by Tom Hudson

Works with CAD-3D 1.0 and CYBER STUDIO



This first 3D FONT package contains over 250K of serif and sans-serif letters. Design your own 3D greeting cards, signs, logos, and letterheads. *Special Bonus Program:* Tom Hudson's color SUPER EXTRUDER TOOL, written by Tom to create these fonts. Design your own fonts, or create new kinds of complex, multicolored 3D objects (such as those seen in the 3D DESIGN DISKS) that can't be built with CAD-3D alone.

3D-FONTS I
ST0224 \$29.95
REQUIRES: CAD-3D 1.0, or CYBER STUDIO

3D DESIGN DISKS

FUTURE DESIGN DISK™

by Darrel Anderson



Get a fast start on your three-dimensional explorations with the CAD-3D FUTURE DESIGN DISK. Everything you need to create spacecraft, stations, bases, vehicles, robots and androids. Model your future then populate it with androids and CAD-People. Bring it to life with CYBER CONTROL; detail it with any popular paint program. Includes:

- Blueprints
 - Complete models
 - Component parts
 - Construction tips
- FUTURE DESIGN DISK ST0232 \$29.95**

REQUIRES: CAD-3D 1.0, or CYBER STUDIO

ARCHITECTURAL DESIGN DISK™

by Darrel Anderson



Create CAD-3D renderings of your Dream House or build an entire CAD-3D City from the ground up. Component parts including: Doors, Windows, Arches, Roofs, Walls, Stairways, and a wide variety of architectural accoutrements. Create your own CAD structures and populate them with HUMAN DESIGN figures.

Build "sets" for your animated Cybervideos. NOTE: The ARCHITECTURAL DESIGN DISK can be used to visualize and render real-world architecture. It is not intended for use as an architectural engineering tool. Includes:

- Blueprints
- Complete models
- Design tips

ARCHITECTURAL DESIGN DISK I ST0243 \$29.95

REQUIRES: CAD-3D 1.0, or CYBER STUDIO

HUMAN DESIGN DISK™

by Richard Berry



Populate the CAD-3D Universe. Bring to life your CAD-3D creations with the HUMAN DESIGN DISK. Amazingly accurate modular male and female skeletal anatomy forms are included. Detailed head and hands add realism. Modify your figures to create the infinite variety of the human form, pose your figures, detail the images with any popular paint program, or bring them to life with the CYBER CONTROL Animation System. Includes:

- Blueprints
- Tips on the dynamics of human anatomy.

HUMAN DESIGN DISK ST0242 \$29.95

REQUIRES: CAD-3D 1.0 or CYBER STUDIO

CARTOON DESIGN DISK™

by Maurice Molyneux and Andy Eddy



And now for something completely different — 3D cartoon characters! Plus, an entirely new approach in design disks. You get not only a collection of wonderful 3D comic characters, but specially designed CYBER CONTROL programs to animate them. You decide which way the heads turn, where the eyes look, how fast they move (or fly), then let CYBER CONTROL bring them to life — automatically. Disk includes: complete articulated characters, hierarchically designed for use with CYBER CONTROL; a library of "parts" to modify existing characters — or to build your own; detailed documentation describing how to use the many files on disk, how to modify your characters, character creation, animation techniques, and even how to videotape your animations.

CARTOON DESIGN DISK ST0256 \$29.95

REQUIRES: CYBER STUDIO (CYBER CONTROL for animations)

VIDEO TITLING DESIGN DISK™

by Andy Eddy and Maurice Molyneux



Add that professional touch to your videos with spectacular, animated titles. The VIDEO TITLING DESIGN DISK includes an entire 3D font, plus 3D objects designed specifically for titling effects. Custom, easy-to-use CYBER CONTROL programs let you animate your 3D titles, create credit sequences, etc. ADO f/x files are included to add complex ADO moves with CYBER PAINT. Plus, sample graphic files demonstrate advanced ADO techniques. Documentation includes all necessary instructions, plus a discussion of effective video planning and effects, a description of the equipment needed to tape your computer output, plus tips on getting professional results.

VIDEO TITLING DESIGN DISK ST0261 \$29.95

REQUIRES: CYBER STUDIO (CYBER CONTROL for animations; CYBER PAINT for ADO f/x)

ST Cyber Family

CYBER PAINT™ Version 2.0 Pro Animation Studio

by Jim Kent



Three animation programs in one — a time-oriented paint program, a "cel" animation program, and a digital optical printer. If you were a professional video director and wanted a machine to do to video what CYBER PAINT does to Atari graphics, you'd have two choices — either an Abacus A62 DDR (digital disk recorder), or a Quantel Harry. Either cost approximately \$200,000.

Time Painting
CYBER PAINT has all the standard paint tools — Box, Brush, Rubber Line, Fill, etc. — then adds the *dimension of time*. For example, in the standard paint-program cut-and-paste operation, you cut your image out from one area of the screen then paste it to another. In CYBER PAINT, you cut your image out of frame #1, move it, then paste it over any range of frames. When you play your animation, the pasted image floats smoothly from the first position to the last.

In a standard paint program, you load a single picture. Of course you can do this in CYBER PAINT — or you can load an entire 3D CYBER STUDIO animation, and touch it up with CYBER PAINT's time tools.

Cel Animation

Classic movie animations were painted, frame by frame, on celloid — or "cels." CYBER PAINT



3 frames of CYBER STUDIO animation before CYBER PAINT



The same 3 frames after a CYBER PAINT touch-up



adds the power of the computer to this technique. The mouse-operated Frame Slider Bar instantly accesses any frame (cel). Auto-"bluing" prints a ghost image of your previous changes to subsequent frames, making registration of step-through animation a breeze.

CYBER PAINT's unique *compositing* system lets you overlay or underlay almost any type of graphics file — load a 200-frame 3D CYBER STUDIO animation; underlay a DEGAS background to frames #1 to #100, a NeoChrome picture to frames #101 to 200; overlay a converted Aegis Animator script to frames #26 to #115... The combinations are endless.

Digital Optical Printing

We've saved the best for last. You've seen this TV special effect on everything from rock videos to the evening news. Titles and images spin and glide around the screen like magic carpets. We call it ADO f/x (Antic Digital Omnimover effects).

Clip any part of your picture and you're ready to fly! Drag the Turn bar setting to 2 turns, then instantly preview the effect. Click to change the axis — or adjust all three axes; the clipped image now spins and twists in place. Even draw a curving path for the twisting, image to follow. CYBER PAINT is the fastest possible way to create professional looking animations.

Works with all ST paint programs, plus CYBER STUDIO (ST0236).

All new! Version 2.0

Jim's added so many new features we haven't space to list them all. But here's a preview:

- All new Color menu:
 - Palette change per frame
 - Cut & Paste color range
- Color f/x menu:
 - Fade over time
 - Blend over time
 - Cycle over time
- Pixel f/x menu:
 - True antialias
 - Pixel shatter
 - Reduce to edges
 - Outline (neon effect)
- Separate many colors
- Automatic traveling mask — normal, inverse, XOR
- Splice Load & Reverse Save
- Paste Under
- Playback frame segment
- View frame in ADO

CYBER PAINT
ST0251 \$79.95
(Upgrade \$25 plus original disk)

REQUIRES: One-megabyte RAM & color monitor

The New Standard in Paint Programs

SPECTRUM 512

The Truecolor Paint Program

by Trio Engineering

It didn't take long. Since its premiere last October, SPECTRUM 512 has already become the paint program standard for the Atari ST. Easy to see why: 512 colors that you don't have to jump through hoops to use. Just pick a color from the palette of 512, and draw with it — anywhere on screen. Or cut a block from any picture and paste it to any other picture; don't worry about matching palettes, all colors are available anytime!

Engineering at 617 964-1673 and ask about SPECTRUM 512 accessories, including DigiSpec, which creates full-color SPECTRUM 512 pictures using the ComputerEyes digitizer.)

SPECTRUM 512 is more than 24,389 colors. It's a collection of the most sophisticated graphic paint tools available on any microcomputer. When you own SPECTRUM 512, you own a professional system unlimited in its possibilities.



Digitized entirely with DigiSpec & ComputerEyes

- Patterns—20 predefined, 20 user-defined
- Brush
 - 38 shapes — solid or patterned
 - User-definable brushes
 - Auto-align patterns, or pixel offset for overlap
- Adjustable Airbrush
- Sophisticated color RGB search and replace; local/global
- Add or subtract RGB values
- Add or subtract luminance
- All Color Edits global or local, one or more colors
- Magnify window, all tools active
- 12-screen scrollable cut & paste buffer (1-meg)
- Load CYBER, DEGAS, or NEO pictures
- Programmable slideshow program supports Spectrum 512 animation and Stereotek 3D glasses

Anti-aliasing:

- Zag-Out anti-aliasing, or Blur defocusing
 - Full screen
 - Local box
 - Brush
- No Zag—Anti-aliasing and auto-curve for:
 - Lines
 - Polygons
 - Circles

Colors:

- Select colors from 512-color Main, or User-defined palettes
- Save and load custom palettes
- Auto-create color range
- Color cycle Brush or Airbrush
- Fantastic Color Edit mode includes:
 - Search and replace colors

SPECTRUM 512
ST0249 \$69.95

REQUIRES: Color monitor 520ST's built before 12/85 may require \$30 MMU chip upgrade from auth. serv. center.

DEGAS™ Electronic Arts
NeoChrome™ Atari Corp.
ComputerEyes™ Digital Vision



"Drops" by Richard Berry

More colors means higher perceived resolution.

Anti-aliasing replaces ugly "staircase" lines with smooth, delicate curves. Multiple dithering combinations simulate a palette of 24,389 colors for creamy smooth gradient fills, or photo-realistic digitized color pictures — SPECTRUM 512 loads Amiga HAM pictures. ¡Call Trio

Here are just some of your tools!

Drawing:

- Freehand
- Rubber Line, French Curve, Polygon, Circle/Ellipse (all with no jagged mode)
- Fill—patterned or solid
- Fill New—fill over any existing patterns or colors!



AT 50 states 6AM-6PM PACIFIC TIME
Monday-Friday MasterCard VISA Only

THE CYBER GALLERY

Since last October, when we released CYBER PAINT, CYBER CONTROL, and SPECTRUM 512, we've gotten a lot of requests for graphic demos. Here on these pages is the most bang we can muster for your demo buck.



HOLO CONTEST I



HOLO CONTEST II

CYBERMATION VIDEOTAPE

Here it is! The videotape that shows what can really be done with the Cyber family — and how to do it. Created by Tri-Vision, this tape contains our best demos to date, and a marvellous tutorial about how all of the Cyber products work. VHS and 8mm format — don't miss it.

VHS0002

CAD-3D COLLECTION I

Original collection of CAD-3D objects created by Tom Hudson.

(SS,M,-5)

PD9085

CYBERSCAPE SB0104

The original tour de force Cyber animation by Darrel Anderson. (DS,C,I)

CAD-3D COLLECTION II

Complex CAD-3D objects, featuring Space Shuttle, 2 fighters, Atari logo, etc.

(SS,M,-5)

PD9101

CAD-3D COLLECTION III

The latest complex CAD-3D objects, featuring trumpet, grand piano, bicycle, etc. Packed disk includes sample objects created with CYBER

SCULPT. (SS,M,-5)

PD9103

CYBER DEMOS I

Features the Human Design Disk skeleton doing a back flip, plus more demos of CYBER CONTROL's capabilities.

(DS,C,I)

PD9104

CYBER DEMOS II

Amazing demo of texture mapping, plus examples of advanced CYBER PAINT techniques.

(DS,C,I)

PD9105

CYBER DEMOS III

Real-time sequences digitized with Supra View into Cyber Paint, plus many more Cyber animations.

(DS,C,I)

PD9106

SPECTRUM 512 DIGIPIX

This packed disk contains our best collection of beautiful digitized Spectrum pics, including the woman in this issue's ad.

(SS,C,-5)

PD9107

SPECTRUM SLIDESHOW

The original slideshow disk, featuring Ellen and Laserbee by Darrel Anderson, and more! (SS,C,-5)

PD9108

SPECTRUM PORTFOLIO

Darrel Anderson and Richard Berry collaborate for a brilliant demonstration of Spectrum 512's fine art capabilities.

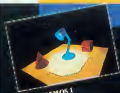
(SS,C,-5)

SB9108

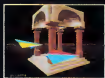
STEREO STEELYBOINK

If you own a pair of Stereotek 3D glasses, you've got to see this demonstration of animated ray tracing on the ST by Tom Hudson. (DS,C,-5)

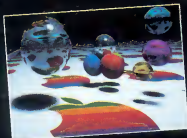
PD9098



CYBER DEMOS I



CYBER DEMOS II



SPECTRUM 512 DIGIPIX

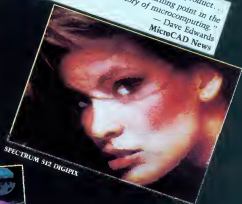
STEREO STARS/SLIDES
Float through stereo space with the Stereotek 3D glasses and this hypnotic starfield. Plus, over ten full-stereo slide pictures. (DS,C,5) PD9099

HOLO CONTEST I
One of our favorite entries in the CYBER CONTROL Hologram contest: the dark peace of an ancient temple is broken by the majestic visit of an advanced race! Contest winner, Dann Parks of KTEH TV (San Jose, CA) demonstrates how to simulate realistic object dynamics with a simple, six-line CYBER CONTROL subroutine. The

.CTL code is included with the animation. Watch out Steven Spielberg! (DS,C,1) PD9109

HOLO CONTEST II
Soaring bird to roaring spaceship, while mechanical walker treads nearby. For FLYNIGHT.SEQ, contest winners Paul Dana and Robert Mills have actually created a desk accessory that creates moving starfields for CYBER CONTROL animations automatically. If you own CYBER CONTROL, you have got to have this disk! Also includes hierarchical motion examples. (DS,C,1) PD9120

"The (Cyber) system is a pioneering product...
...a turning point in the history of microcomputing."
— Dave Edwards
MicroCAD News



SPECTRUM 512 DIGIPIX



SPECTRUM PORTFOLIO

HOLO CONTEST III
A flat plain becomes a living, breathing mountainous region in CREATION.SEQ. Contest winner Dan Reifsnnyder wrote a topographic contour-mapping program that turns DEGAS Elite/ CYBER PAINT pictures into 3D contour-map object files that you can load into CAD-3D. Program plus animation included on disk. (DS,C,1) PD9121

NOTE: All products on this page are in the public domain and may be freely distributed. All disks are \$12.00; CYBER VIDEOTAPE is \$24.95. All programs are self running, with the exception of the three CAD-3D COLLECTION disks, which require CYBER STUDIO or CAD-3D 1.0. Note also the requirements for each product before ordering:
SS = single sided disk,
DS = double sided disk,
C = Color,
M = Mono or Color,
1 = 1 megabyte RAM,
.5 = 1/2 megabyte RAM.



ORDER
TOLL FREE
(800)234-7001

GENESIS™

The 3D Molecular Modeler

by Scott Legrand



The atoms of life... carbon... nitrogen... hydrogen... oxygen... phosphorus...

This is the stuff we're made of. But until now, only research scientists in large universities could actually *image* the building blocks of matter.

Imagine creating the basic elements yourself, then watching as they come to life. And with a pair of STEREOOTEK glasses, this miraculous process unfolds in 3D stereoscopic depth.

Using GENESIS and your mouse, you can:

- load and display amino acids, hydrocarbons, and sugars
- create your own molecules onscreen
- output your molecules as CAD-3D objects, or as DEGAS/NeoChrome pictures
- Explore X-ray Crystallography

Rotate 3D molecules on any axis — X, Y, or Z, using real-time control. In stereo, hexagonal carbon rings and delicate fingers of hydrogen burst right out of your monitor.

With two molecules onscreen, you may create your own rules for molecular bonding, then animate the chemical reaction between them.

GENESIS offers the same type of iconic control panel and intuitive human interface pioneered on the Atari ST with CYBER STUDIO (ST0236).

Three different display modes for every imaging need:

- 1) STEREOOTEK LCS glasses
- 2) Red/blue anaglyphic glasses
- 3) No-glasses (monoscopic)

And with data provided on the program disk, you can create virtually any known molecule using the on-line periodic table of elements.

GENESIS

ST0239 \$79.95

REQUIRES One-megabyte RAM

True stereoscopic 3D graphics for your Atari ST

STEREOOTEK™ 3D GLASSES

By LC Technologies

Put on the STEREOOTEK glasses and jump into a new universe. Discover a magical world that you always knew existed. That extra dimension — depth. Now you can add depth to your computer graphics with STEREOOTEK Liquid Crystal glasses. Solid, realistic 3D images you want to reach out and touch. Your STEREOOTEK depth-view system includes:

- One pair electronic Liquid Crystal Shutter glasses with six-foot cable (can be comfortably worn over eyeglasses)



- ST cartridge interface unit — supports six sets of glasses (additional glasses optional)
- DEGAS Elite Stereo Desk Accessory
- Stereo CAD-3D animation and stereo slide show by Tom Hudson
- For programmers: Complete developer's instructions plus source



All 3D states 6AM-8PM PACIFIC TIME
Monday-Friday MasterCard, VISA Only



code for adding stereo to your own programs [C or GFA BASIC]



The secret to full-color stereo images on a computer screen is electronic Liquid Crystal Shutter (LCS) glasses. Two optical shutters in eyeglass frames are connected electronically to the ST. Every time the ST screen refreshes (60Hz/color, 70Hz/mono) one shutter closes and the other opens. The monitor displays alternating right and left eye views synchronized with the shutters. The alternating views appear faster than the eye can see, and your brain translates the normally flat monitor image into one of startlingly realistic depth.

STEREOOTEK 3D SYSTEM
TH9020 \$149.95
ADD-ON GLASSES ONLY
TH9021 \$99.95

Satisfaction guaranteed or your Money Back! (during 30-day warranty period)
LC Technologies is a venture of Tektronix, Inc.

A new perspective in Arcade Action! SHOOT THE MOON™

3D Alien Invaders

by Mountain Fresh Software



SHOOT THE MOON is a colorful, high-speed shoot-em-up in the classic arcade tradition, with fabulous animation, original sounds, and one big difference — *stereo*. The floating aliens menace you from multi-depth levels as you maneuver your ship beneath them, find the right depth level, and pulverize them.

And, for those who want their traditional arcade games to remain completely traditional, you can play SHOOT THE MOON in 2D without the glasses. The game play is just different enough to make it a whole new challenge. Master the double-dimension version before moving on to the STEREO TEK universe, or, if you already have STEREO TEK glasses, master both versions — if you can!

SHOOT THE MOON
ST0252 \$39.95

REQUIRES: Color Monitor

LCS WANDERER™

Deep space has never been so real!

by Pyramide Software

The first ST game designed for full-depth stereo. Written in France, but set in outer space, this stunning arcade adventure transports you through galactic Space sectors, Black holes, and Limbo. Startlingly realistic, stereo point-of-view animation puts you in the cockpit as you swoop and dive through star fields while dodging enemy aircraft.



LCS WANDERER is really several games in one. Journey from dogfights in the space sectors, to interstellar poker strategies, from Battlezone-style planetary sectors, to the stereo tunnel of the black holes.

The liquid crystal clarity of the STEREO TEK glasses transforms LCS WANDERER into a multi-colored micro universe within your monitor. Includes a completely redesigned solid-surface cockpit, full color displays, and reduced eye fatigue compared to the original red/blue version.

LCS WANDERER
ST0238 \$39.95

REQUIRES: Color monitor and STEREO TEK Glasses
Battlezone™ Atari Corp.

The latest STEREO game is here! 3D BREAK-THRU™

Point-of-View Handball
by Shelbourne Software



Trapped! Hopelessly trapped in yet another ghostly corridor of this haunted three-dimensional labyrinth. And there, way down there at the far end of the hallway — the dreaded tri-level, multi-color, phasic-vulnerable brick wall that seals my doom!

But wait — can it be? YES! Gliding directly toward me [in full stereo-depth], the friendly form of a brindle-bagshaw bent-english Brick Buster. If I can but deflect it with my personal, porous poly-paddle & Missile Mit (which I have nicknamed Phyllis), Brick Buster will rebound down the corridor and bust one brick [for the wall is, as previously mentioned, phasic-vulnerable].

Okay, stereo fans, it's the latest real-time dimensional challenge for the optically adventurous. Hook up your STEREO TEK glasses and bust out of this multi-level, point-of-view game. At the far end of each corridor is a brick wall sealing off

your escape. You stand at the near end controlling a translucent paddle which reflects balls back toward the wall. Break all the bricks in the multi-layered wall to reach the next corridor.

Enhanced by rich graphics, the stereoscopic depth illusion works beautifully in 3D BREAK-THRU, especially when the next room begins to appear beyond the holes in the wall! As you reach the more complex levels some of those things floating at you aren't so friendly anymore! Defend yourself by firing off bits of your paddle, but with every shot, your paddle shrinks in size!

And 3D BREAK-THRU also works in monoscopic mode. So if you want to check the game out but don't yet have the glasses, don't let a lack of liquid crystal prevent you from wandering these haunted corridors.

3D BREAK-THRU
ST0253 \$39.95

REQUIRES: Color Monitor

BYTE picks FLASH — Top Atari terminal program!

FLASH 1.6™

The Most Popular ST Terminal Program

by Joe Chiappese and Alan Page

Thank you FLASH owners! There are more than 25,000 people who have made FLASH the most popular terminal program for the Atari ST. We'd like to take this opportunity to thank you for your positive word-of-mouth. We're very proud of FLASH and, naturally, happy that so many of you feel the same way.

Since FLASH was introduced, we've added more and more features. In fact, the new features have been described so thoroughly in recent Catalogs, we've forgotten to mention the original func-

tions that made FLASH a best-seller to begin with.

So, for those of you who do not yet own FLASH, here's a collection of its most popular features. (If we miss a few, would you veteran FLASH owners drop us a line and tell us what we left out? We'll be sure and put it in the next Catalog.)

- Flip instantly between online screen and capture buffer with a single mouse click.
- Giant capture buffer automatically adjusts to available RAM — entire session automatically placed in word processor.

FREE! Try FLASH now and get \$15.00 of CompuServe access time. This effectively brings the price of FLASH down to \$14.95! And new FLASH owners join the GENie network free. No registration fee. How can you lose?

- Built-in GEM word processor includes:
 - Adjustable word wrap
 - Mouse controlled
 - Block Cut & Paste
 - Reformat text blocks
 - Automatic Search
 - File merge
 - Buffer or text-block output to disk,

"FLASH is my #1 choice on the Atari ST."
— Ron Luks, Founder of CompuServe's SIG* Atari and Atari Developer's Forum.

- printer, or RS232 port
- High-speed window scroll
- Create custom "script" files for unlimited power and flexibility. (Over 90 commands; a full programming environment.)
- Twenty programmable function keys, which may be linked to disk script files.
- Typeahead buffer lets you scroll thru previous lines and resend them.
- Command line alternative to mouse control — includes history buffer.
- Two clocks: Real-time and Elapsed time.
- Bullet-proof file transfers at speeds up to 19,200 baud. Protocols include:
 - Xmodem (CRC & checksum)
 - Ymodem batch
 - B/B + Protocol (CompuServe)
 - ASCII and DC2/DC4
- Mainframe terminal emulation includes:
 - DEC VT100 w/character graphics (and VTS2)
 - Vidtex color graphics (CompuServe)
- Supports 110 baud for Telecom Devices for the Deaf.
- Ability to run other ST programs from inside FLASH.
- Custom translation tables automatically filter incoming or outgoing characters.
- Built-in ARC commands.

FLASH is the fastest, most complete, most reliable terminal program I've used...
— M. Ratcliff, ANALOG Magazine

Ask Anyone
So if you don't own FLASH, you should. As we've said before: If you're looking for an ST terminal program, ask any online veteran about FLASH. They'll be glad to tell you. And we wouldn't say that if we weren't sure of the response.
FLASH 1.6
ST0220 \$29.95
(Free update with original disk and \$5.00 shipping. **BUT SEE SHADOW OFFER BEFORE YOU DECIDE.**)

FLASH OWNERS: BUY SHADOW & GET FLASH 1.6 FREE!

FLASH version 1.6 includes built-in SHADOW access (see SHADOW description, opposite page). This means that FLASH calls SHADOW directly with no need for the SHADOW desk accessory (though you still need the SHADOW program).

The SHADOW disk includes a "patch" program which automatically updates FLASH v. 1.51/52 to 1.6.

Add it up: A FLASH upgrade is free with your original disk plus \$5 shipping. SHADOW includes \$15 free CompuServe time. The FLASH 1.51/52 owner who orders SHADOW saves \$20 and effectively gets SHADOW for \$9.95. That's only \$4.95 more than you'd pay for us to ship the FLASH update by itself.

FLASH COMMAND CARDS

FLASH-CARDS
TH9025 \$7.95



**Soup up your
modem...in
software!**

QUICKTRAN™ The Modem Accelerator

by Adrian Jovanovich
Works with FLASH, or
by itself.

Your 1200-baud modem
can now transfer files at
over 2000 baud... 2400
baud now files at 4000
baud... The telephone
company can't stop you.
It's totally legal!

QUICKTRAN comes to
you as two disks, each
with an identical desk ac-
cessory. One QUICKTRAN
accessory shrinks the file
you're sending — in real
time, using better com-
pression than ARC.TTP.
The second accessory —
on the receiving end —
expands the file to its
original size as it's coming
in over the phone lines.
Why spend hundreds on a
faster modem when you
can transfer files in
almost half the time with
QUICKTRAN?
QUICKTRAN
(2-disk set)
ST0247 \$34.95

BBS and Kermit Accessory for Flash! REMOTE CONTROL ACCESSORY & KERMIT PROTOCOL™

by Joe Chiozzese and
Alan Page

Instant Kermit protocol
within Flash with this
custom desk accessory.
Plus Remote Control ac-
cessory turns Flash into a
mini-BBS.
REMOTE/KERMIT
ST0226 \$24.95
REQUIRES: FLASH ST0220

Be in two places at once.

SHADOW

The Multitasking File Transfer Answer

by Double Check Software

Here's a background file
transfer program that
works. We've run
SHADOW past our online
experts and consulted with
FLASH author, Alan Page
as well. They all gave it
high marks. It's a smooth,
solid piece of programming
that does its job while
staying modestly in the
background. No more
waiting for file transfers.

SHADOW gives you trans-
parent background file
transfers with any GEM
terminal program. While
you are in the process of
downloading or uploading
files from an online ser-
vice or a BBS, you can exit
to the desktop and run
any program you wish.
Here's your opportunity
to get that correspondence
done — or play that
favorite game. Once the
transfer has begun, you
can do anything but turn

off the AC power switch.
While in other programs,
a block countdown is
displayed in the corner of
the screen, an optional
bell alerts you of its
completion. SHADOW is
elegant.

Let's say you use FLASH.
Wouldn't it be nice to
browse through the cap-
ture buffer — or do some
editing while waiting for
that file to download?
Now you can. You can
even load files into the
capture buffer, save them
to disk, or print out
blocks — your I/O is
completely free.

SHADOW works with X-
Modem (checksum, CRC,
or 1K CRC), Y-Modem
batch, CompuServe's B-
Protocol, B+ Protocol,
and ASCII. To make back-
ground file transfers 100
percent secure, SHADOW
even survives system
resets! Did a program
crash on you in the
middle of an important
download? No problem.
Press the reset button,
and watch the download
continue. You can even
switch resolutions or
change monitors during a
transfer. SHADOW is
robust.

**Works with every GEM
terminal program.**

A desk accessory is built
into SHADOW for easy
access to a background
autodialer and a VT52
terminal for standalone
operation. And for you
programmers, we've in-
cluded sample source code
and all the information
you need to access
SHADOW's routines from
your own programs.
SHADOW
ST0259 \$29.95

FLASH OWNERS: BUY SHADOW & GET FLASH 1.6 FREE!

Each SHADOW disk in-
cludes a "patch" program
which automatically up-
dates FLASH v. 1.51/52 to
1.6. FLASH version 1.6 in-
cludes built-in SHADOW
access so that FLASH calls
SHADOW directly with no
need for the SHADOW
desk accessory (you still
need the SHADOW AUTO
program). Check out the
arithmetic on the FLASH
page, opposite. It's a big
savings.



All 50 states A.M.F.M. PACIFIC TIME
Monday-Friday MasterCard, VISA Only

PHASAR 3.0™

Professional Home Accounting System and Register

by Marksman Technology

PHASAR, the friendly, GEM-based, single-entry accounting system has just gotten friendlier. Marksman Technology listened to your suggestions, and the result is now available — Version 3.0.

Just some of the new features include:

- Batch-print window addresses on checks
- Custom-define screen colors
- Fiscal year accounting
- Sort by name as well as amount
- Enhanced calculator: parenthetical expressions/5-level memory buffer
- Recall most-recent transactions
- Abort account reconciliation anytime
- Improved Tax program doubles as report writer
- Coded and recompiled to save on disk space

Standard features include:

General Features

- 130 expense/income categories
- 40 accounts (VISA, checking, etc.)
- Up to 500 transactions per month
- Custom check printing
- A.I. parser predicts input, minimizes typing
- Instant context-sensitive help
- Relational design integrates financial data

Transactions

- Automatic transfers between accounts
- Split-category transactions
- Create transaction macros for repetitive entries

- Point-and-type spreadsheet-style relational summary update

Financial Analysis

- Easy budget setup and maintenance
- Analyze loan/savings plan
- Display multiple loans simultaneously for easy comparison

Reconciliation

- Confirm transactions with a single keystroke
- Display outstanding transactions for any account

IBM and Amiga users say "The first home accounting package I have found in five years that is actually usable." — Mark Baldwin, Littleton, CO

"I am enjoying your tutorial almost as much as I admire the power and versatility of the software itself." — Joe Joyce, Huntington, VT

**NEW!
VERSION
3.0!**



Reports

- Clearly formatted printed reports include:
 - Account Summaries
 - Category Summaries
 - Net Worth Statement
 - Tax Calculations
- Display or print total income/expenses, monthly or year-to-date
- Sort categories in any order
- Built in data graphing

Date/Address Organizer

- Store up to 250 names, addresses and phone numbers
- Integrated scheduler stores special occasions
- Display calendar with highlighted special occasions
- Optional auto-alert reminds you of important events

Tax

- Design your own tax forms—never out of date
 - Calculate tax liability in less than one minute
 - Project tax liability at any time
- PHASAR
ST0237 \$89.95
(Upgrade \$20 with original main program disk.)

BASE TWO™

The GEM Database by the Authors of DBMASTER ONE

The next step in databases!

by Dan Matejka and Stanley Crane



It's no fun re-learning your database commands every time you boot it up. And those simplistic "filecard" databases just don't have the power to do the job. Or, maybe you've just created your custom database, entered 5,000 records, and now you want to print a report...good luck. You need a degree in programming just to get some decently formatted hard copy.

Dan Matejka and Stanley Crane have eight combined years of experience writing databases on computers ranging from the IBM PC to the Apple Macintosh. And their databases range in complexity from the extremely powerful and complex IBM PC DB MASTER to the familiar, introductory

DB MASTER ONE on the Atari ST. They've watched the ST database market grow—and they've spotted a gap: until now, ST databases have been either too simple, or too complex. Until now, ST owners were limited to easy-to-use, inflexible "mailing lists," or involved, programmable "throw-backs" to the CP/M or MS-DOS world. Until now, there was no intuitive, yet powerful database featuring an adaptable report generator. *Until now.*

BASE-TWO fills the gap. Entirely GEM-operated, DB MASTER ONE owners will find it familiar, yet far more powerful. Look over some of the features and see if it solves your problem:

INSTANTANEOUS SORTING!

size	number records	sort time
512K	5,000	5.1 sec
1 Meg	10,000	9.7 sec
2 Meg	20,000	19.2 sec
4 Meg	50,000	46.1 sec

Using a sample eight-field mailing list.

- Variable field types:
 - Implicit (default)
 - Alpha
 - Numeric
 - Date (calculable)
 - Formula
- Formulas fields automatically calculate results from several fields in same record
- Adjustable numeric decimal placement
- Re-edit database at any time without losing data
- User-definable .DIF file creation for software compatibility
- DB MASTER ONE conversion program
- On-line Help screens
- Optional mouse or keyboard control
- 64 character label length
- 100 fields per record
- Multi-level Search and Sort
- Totally RAM-based for instant action
- Format disks from within program
- Optional, automatic date, time and page numbering
- Print reports to screen, printer, or ASCII disk file for word-processor editing
- Optional subtotal printout
- Adjust number of records per page
- Double-line report headers
- Place "comment" text anywhere
- Customize with printer control codes
- "Soft" field borders for autofield truncation
- Single-sheet or continuous feed option
- Store 10 custom reports for each file
- Up to 100 unique fields per report

BASE TWO
ST0246 \$59.95

DB MASTER ONE is a registered trademark of DB MASTER Associates.

The intuitive BASE-TWO Report generator includes:

- Multi-line field word-wrap; screen and printer
- Completely adjustable label or column-format report



All 50 states A.M. 6PM PACIFIC TIME
Monday-Friday MasterCard VISA Only

The world on a disk. Your eye in the sky. MAPS AND LEGENDS™

The Cartographer STEREO Version

by Harry Koons and
David Chenette



Float over any spot on earth, from any altitude — in stereoscopic depth, if you wish! MAPS AND LEGENDS has become our most consistently selling product. And no wonder! As the word-of-mouth spreads, people naturally want to experience this fascinating and educational program.

MAPS AND LEGENDS accurately plots Earth land masses on your Atari screen using one of eleven map perspectives including: Orthographic, Foucault, Mercator, Flamstead, Cylindrical, 3D Globe and more. Adjust latitude, longitude, and altitude to place yourself over your home town — or over exotic faraway lands!

Custom Overlay function lets you design your own maps, or use the DATAMAP disks (this page) and load pre-designed overlays. Save multiple map views as CYBER PAINT animations! MAPS AND LEGENDS 3.0 ST0202 \$34.95 (upgrade is \$15)

REQUIRES: StereoTek Glasses for stereoscopic effect

LET'S GET TECHNICAL

Packed with features, including: Stereo Compatibility, Built-in 9000-Coordinate Database, 11 Different Map Perspectives, Plotting from any altitude, Works in all 3 screen modes, Built-in Paint System (and compatible with CYBER PAINT, DEGAS and NEO), Multi-font Labeller, Custom Overlay Plotter (create your own maps—build your own map databases), Auto-locate Mode (reads coordinates, distance and bearing from maps) and so many more that we don't have room to list them all.

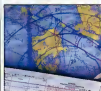
*The professional
flight planner
has just gotten
better!*



THE NAVIGATOR 2.0™

by Scott D. Stephenson

Works with MAPS AND
LEGENDS



When author (and navigator) Scott Stephenson wrote the professional, automated flight planner, THE NAVIGATOR, he requested suggestions for improvements to the program. Result: Big response from pilots all over the world! So okay, here it is. Version 2.0 of THE NAVIGATOR. With so many new features we had to add a second disk! Just a few of the many

improvements include:

- Greatly expanded ICAO databases (2000+ waypoints in US)
- Built-in Navigation Toolkit for database modification
- Quick-access, onscreen 'Micro Menu'
- Increased printout options
- Route 'Flip,' 'Return,' 'Move row'
- Expanded to 60 rows
- Equal Time Points
- Estimated time of arrival
- User preferences file
- R/DME up to 999NM
- Improved scrolling
- Faster calculation
- A-P drive paths
- On-line Morse code table

And much, much more, as you'll discover.

Private pilots, military pilots, navigators (oceangoing as well as air), and commercial operators can use this amazing program to create accurate, detailed flight plans. Amateurs, arm-chair flyers, teachers and students of navigational theory can discover how the professional navigator plans his flight, compensates for wind direction, establishes waypoints, and calculates times and distances. THE NAVIGATOR comes complete with European ICAO, Asian ICAO, and US ICAO databases, and includes a special MAPS AND LEGENDS overlay function to create custom, graphic map overlays.

THE NAVIGATOR

ST0245 \$49.95

(Upgrade to 2-disk set only \$15. Please include original disk.)

Datamap Collections

DATAMAPS II™

Rivers & Highways

by David Murray



New DATAMAP overlay files create the world's rivers, the great highways, plus the Great Wall of China, the Alaskan Pipeline, the Trans Siberian Railroad, and The Orient Express! A fraction of the rivers contained on this disk include North American: Yukon, Saskatchewan, Mississippi, Platte; South American: Amazon (plus tributaries), Plata, Magdalena; Europe: Volga, Danube, Rhine; Africa: Nile, Congo, Orange; Asia: Ganges, Irrawaddy, Yangtze, Huang-Ho. Some of the highways: US Interstates, Pan American, Trans Amazon, and many more.

DATAMAPS II
ST0258 \$24.95

REQUIRES: MAPS AND
LEGENDS 2.0 or greater

DATAMAPS I™

Boundaries of the World

This original DATAMAP collection contains overlay files to create National Political Boundaries: Europe, Latin America, S. America, Asia, Africa; Provincial Boundaries: Australia, Canada, China, U.S.S.R., plus bonus Historical maps.

DATAMAPS I
ST0227 \$24.95

REQUIRES: MAPS AND
LEGENDS 2.0 or greater

P.I.E.TM

Professional Icon Editor

by Alex Leavens

Customize Your Desktop Icons! Redesign your Trash Can to look like a paper shredder.

P.I.E. is the Professional Icon Editor — for programmers as well as desktop artists. Author, Alex Leavens has added icon code generation so you can now design icons for your own programs. And while he was at it, he added a bunch of graphics improvements to delight the artist in you.

New features include:

- Generates Resource Construction Set code for icon images; P.I.E. can be used from within the Resource Construction Set to create and edit icons for the resources you're currently working on!
- Improved Editing Features:
 - Faster Print and Line Modes
 - New Image Cut & Paste Functions
 - Selectable Fill Patterns
 - Horizontal and Vertical Image Flip
 - Multiple Sub-function Menus added
 - Nine-level Bi-directional Undo buffer
- In-program Desktop Icon Preview mode
- Improved Keyboard Resource

P.I.E.
ST0248 \$29.95

MACRO MOUSETM

The Mouse Recorder

by Charles Johnson



EVERYONE'S A WINNER!

Just remember to send in your warranty cards.

- Automatically receive news of product upgrades.
- Be among the first to hear of new releases.
- Get in on special offers available to registered owners only.



ALL 50 STATES 8AM-6PM PACIFIC TIME
Monday-Friday MasterCard, VISA Only

New!

Imagine turning on your computer, then sitting back and watching the mouse cursor glide across the desktop, load CAD-3D, and create its own space ship! And you only touched the power switch. It's as if a ghost were operating your ST!

MACRO MOUSE records all mouse movements, button clicks, and keyboard presses, then plays them back in real time. Up to four recordings can be held in memory, or you may save your macros to disk to play later — or link several together and play them sequentially.

It's easy to use. Set MACRO MOUSE on Record and use your computer. MACRO MOUSE automatically records each step. Avoid boring, repetitive operations — let MACRO MOUSE do it for you. Create spreadsheet macros, or automate your favorite telecom program. Special freeze feature lets you insert instructional text at any point for demos. No GEM program required.

Features include:

- Auto-run macro at power-up.
- Endless loop playback with protected keyboard for demos.
- Text-message with timed display or keypress exit.

- Set "loop points" anywhere.
- Pause & restart playbacks with a keypress.
- Load DEGAS fonts for custom display.
- Chain macros.

Bonus Utilities!
Order MACRO MOUSE now, and receive these two bonus programs: SUPER SELECTOR replaces the dismal GEM file selector. It sits in the AUTO folder and works with any program that calls the standard GEM file selector. Change drives with one click; file sizes plus free disk space displayed; plus much more. Once you've used it, you'll never go back!

ALHELP is a collection of handy utilities accessed by the [Alt][Help] key. Not a desk accessory, ALHELP is accessible anytime from TOS as well as GEM programs. Includes:

- Adjust color registers & instantly switch to one of 10 custom palettes anytime.
- Set keyboard sound, and repeat & delay rates.
- Set disk write-verify on/off
- Display free RAM.
- 4-function, 32-bit dec/hex calculator.
- Cold or warm reset from keyboard.
- Custom screen printing routines.
- Machine language: takes only 10K.
- Much more...

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- Frequency ADSR—

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